UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,550	03/20/2007	Motoyuki Ohtake	SON-3439	4912
	7590 12/15/200 MAN & GRAUER PLI	EXAMINER		
LION BUILDIN		SPECTOR, DAVID N		
1233 20TH STREET N.W., SUITE 501 WASHINGTON, DC 20036		J1	ART UNIT	PAPER NUMBER
			2873	
			_	
			MAIL DATE	DELIVERY MODE
			12/15/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Application No.   Applicant(s)   OHTAKE, MOTOYUKI								
Examiner   David N. Spector   2873   2774   2775		Application No.	Applicant(s)					
David N. Spector  - The MAILING DATE of this communication appears on the cover sheet with the correspondence address →  Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - If NO period for reply is specified above, the maintenance address of the production of the communication of th		10/581,550	OHTAKE, MOTOYUKI					
The MALLING DATE of this communication appears on the cover sheet with the correspondence address — Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MALLING DATE OF THIS COMMUNICATION.  Fathermore of time may be avoidable under the provisions of 3 CFR 1.186/b. in one with lowers, may apply the limity filed  # 100 period for reply is specified above. The reasonable of 3 CFR 1.186/b. in one with lowers, may apply the limity filed  # 100 period for reply is specified above. The reasonable of 1 CFR 1.186/b. in one with lowers, may apply the limity filed  ## 100 period for reply is specified above. The reasonable of 1 CFR 1.186/b. in one with lowers may apply and use of this communication.  ## 100 period for reply is specified above. The reasonable with specified to be communication.  ## 100 period for reply is specified above. The reasonable with specified to be communication, sever if simply filed. The reasonable with the communication of this communication, even if simply filed. They reduce any search plants in the specified to be specified above. The reasonable with specified above. The reasonable with specified and the specified above. The reasonable with specified and the specified above. The reasonable with the practice under Exparte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  ### 2 Claim(s)16 is fare pending in the application.  ### 4   Claim(s)16 is fare allowed.  ### 2 Claim(s	Office Action Summary	Examiner	Art Unit					
Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extraction of time rits the available under the procession of 37 CPT 1.158(a). Into event, flowered, may a risply be limitely filled.  - If No pariod for reply is specified above, the maximum statulory period will apply and will empt as (it) (in MONTH) for reply is period above, the maximum statulory period will apply and will empt as (it) (in MONTH) for reply is period above, the maximum statulory period will be stated.  - False to reply within the set or extended pariod for reply will be stated.  - False to reply within the set or extended pariod for reply and will empty and will empty and will empty and will empty. (it) MONTH for reply reduce any extended patient term adjustment. See 37 CPR 1.768(a).  Status  1) ☑ Responsive to communication(s) filled on 22 June 2006 through 07 July 2008.  2a) ☑ This action is FINAL.  2b) ☑ This action is non-filinal.  3) ☑ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) ☑ Claim(s) 1-16 is/are pending in the application.  4a) ② If the above claim(s)		David N. Spector	2873					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  Fallested of time may be available under the processors of 37 CFR 1.156(a). In no overn, theorem, may a regive be timely filled.  If NO period for right is specified above, the maximum standary period will apply and will expire 3K (8) MONTHS from the maining date of this communication.  Fallish to reput which the set or created played for maximum standary period will apply and will expire 3K (8) MONTHS from the maining date of this communication.  Fallish to reput which the set or created played for maximum standary period will apply and will expire 3K (8) MONTHS from the maining date of this communication.  Fallish to reput which the set or created above, the maximum standary period will apply and will expire 3K (8) MONTHS from the maining date of this communication.  Fallish to reput which the set of the created apply and the set of the communication.  Pallish to reput which the set of the created apply and		ears on the cover sheet with the c	orrespondence address					
WHICHEVER IS LONCER, FROM THE MAILING DATE OF THIS COMMUNICATION.  Extension of time rapy be available under the provisions of 3/CPR 1.19(a). In so even, however, may a reply be timely lited after SIX (6) MCDN ITS from the realing date of this communication.  Failthout or growth with the set of visualization of the communication of the commun	• •							
1) Responsive to communication(s) filed on <i>Q2 June 2006 through 07 July 2008</i> .  2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.  3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) ☐ Claim(s) <i>1-16</i> is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) <i>1-4</i> and 9-12 is/are rejected. 7) ☐ Claim(s) <i>1-4</i> and 9-12 is/are rejected. 7) ☐ Claim(s) <i>1-8</i> and 13-16 is/are objected to. 8) ☐ Claim(s) — are subject to restriction and/or election requirement.  Application Papers  9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on <i>Q2 June 2006</i> is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of:	WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).					
2a)  This action is FINAL. 2b) This action is non-final.  3  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4   Claim(s) 1-16 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5   Claim(s) is/are allowed. 6   Claim(s) 1-4 and 9-12 is/are rejected. 7   Claim(s) 5-8 and 13-16 is/are objected to. 8   Claim(s) 5-8 and 13-16 is/are objected to. 8   Claim(s) are subject to restriction and/or election requirement.  Application Papers  9   The specification is objected to by the Examiner. 10) The drawing(s) filed on 02 June 2006 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a), Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11   The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12   Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:	Status							
2a)  This action is FINAL. 2b) This action is non-final.  3  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4   Claim(s) 1-16 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5   Claim(s) is/are allowed. 6   Claim(s) 1-4 and 9-12 is/are rejected. 7   Claim(s) 5-8 and 13-16 is/are objected to. 8   Claim(s) 5-8 and 13-16 is/are objected to. 8   Claim(s) are subject to restriction and/or election requirement.  Application Papers  9   The specification is objected to by the Examiner. 10) The drawing(s) filed on 02 June 2006 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a), Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11   The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12   Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:	1) Responsive to communication(s) filed on 02 Ju	ne 2006 through 07 July 2008.						
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.   Disposition of Claims  4)								
All b  Scriffied copies of the priority documents have been received.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b  Some * c) None of:  1. Certified copies of the priority documents have been received in Application No.  2. Certified copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of References Cited (PTO-892)  Attachment(s)  1) Notice of References Cited (PTO-892)  All Notice of Braftersons Falent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Attachment(s)  1) Notice of Braftersons Falent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  5) Notice of Draftsperson's Falent Drawing Review (PTO-948)  5) Notice of Informal Palent Application	3) Since this application is in condition for allowar							
4)  Claim(s) 1-16 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5)  Claim(s) is/are allowed. 6)  Claim(s) 1-4 and 9-12 is/are rejected. 7)  Claim(s) 5-8 and 13-16 is/are objected to. 8)  Claim(s) 5-8 and 13-16 is/are objected to. 8)  Claim(s) are subject to restriction and/or election requirement.  Application Papers  9)  The specification is objected to by the Examiner.  10)  The drawing(s) filed on 02 June 2006 is/are: a)  accepted or b)  objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a)  All b)  Some * c) None of:  1.  Certified copies of the priority documents have been received.  2.  Certified copies of the priority documents have been received in Application No  3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
4a) Of the above claim(s) is/are withdrawn from consideration.  5) □ Claim(s) is/are allowed.  6) ☒ Claim(s) is/are allowed.  7) ☒ Claim(s) and 9-12 is/are rejected.  7) ☒ Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) □ The specification is objected to by the Examiner.  10) ☒ The drawing(s) filed on 2006 is/are: a) ☒ accepted or b) □ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) □ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☒ All b) □ Some * c) □ None of:  1. □ Certified copies of the priority documents have been received.  2. □ Certified copies of the priority documents have been received in Application No  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.	Disposition of Claims							
4a) Of the above claim(s) is/are withdrawn from consideration.  5) □ Claim(s) is/are allowed.  6) ☒ Claim(s) is/are allowed.  7) ☒ Claim(s) and 9-12 is/are rejected.  7) ☒ Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) □ The specification is objected to by the Examiner.  10) ☒ The drawing(s) filed on 2006 is/are: a) ☒ accepted or b) □ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) □ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☒ All b) □ Some * c) □ None of:  1. □ Certified copies of the priority documents have been received.  2. □ Certified copies of the priority documents have been received in Application No  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.								
5) ☐ Claim(s) is/are allowed. 6) ☒ Claim(s) is/are rejected. 7) ☒ Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) ☐ The specification is objected to by the Examiner.  10) ☒ The drawing(s) filed on 2 1 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☒ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) ☒ Notice of Paffsperson's Patent Drawing Review (PTO-948) 3) ☒ Information Disclosure Statement(s) (PTO-SB/08) 5) ☐ Notice of Informal Patent Application	· · · · · · · · · · · · · · · · · · ·							
7)  Claim(s) 5-8 and 13-16 is/are objected to. 8)  Claim(s) are subject to restriction and/or election requirement.  Application Papers  9)  The specification is objected to by the Examiner.  10)  The drawing(s) filed on 02 June 2006 is/are: a)  accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Ceptified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)								
Application Papers  9) ☐ The specification is objected to by the Examiner.  10) ☒ The drawing(s) filed on 02 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☒ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) ☒ Notice of References Cited (PTO-892)  □ Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) ☒ Interview Summary (PTO-413)  Paper No(s)/Mail Date  5) ☐ Notice of Informal Patent Application	· · · · · · · · · · · · · · · · · ·							
Application Papers  9) ☐ The specification is objected to by the Examiner.  10) ☒ The drawing(s) filed on 02 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☒ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) ☒ Notice of References Cited (PTO-892)  2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) ☒ Intormation Disclosure Statement(s) (PTO/SB/08)  5) ☐ Notice of Informal Patent Application	7)⊠ Claim(s) <u>5-8 and 13-16</u> is/are objected to.							
9) The specification is objected to by the Examiner.  10) The drawing(s) filed on 02 June 2006 is/are: a) accepted or b objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some collar or colla	8) Claim(s) are subject to restriction and/or	election requirement.						
10) ☐ The drawing(s) filed on 02 June 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) ☐ Notice of References Cited (PTO-892)  2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) ☐ Information Disclosure Statement(s) (PTO/SB/08)	Application Papers							
10) ☐ The drawing(s) filed on 02 June 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) ☐ Notice of References Cited (PTO-892)  2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) ☐ Information Disclosure Statement(s) (PTO/SB/08)	9)☐ The specification is objected to by the Examine	r.						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some colon None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)	, <del></del>		by the Examiner.					
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) ☐ Notice of References Cited (PTO-892)  2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) ☐ Information Disclosure Statement(s) (PTO/SB/08)	Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).					
Priority under 35 U.S.C. § 119  12) △ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) △ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) ☒ Notice of References Cited (PTO-892)  2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  5) ☐ Notice of Informal Patent Application	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☒ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) ☒ Notice of References Cited (PTO-892)  2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) ☒ Information Disclosure Statement(s) (PTO/SB/08)	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
a) ☑ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☑ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) ☑ Notice of References Cited (PTO-892)  2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) ☑ Information Disclosure Statement(s) (PTO/SB/08)  1 ☐ Notice of Informal Patent Application	Priority under 35 U.S.C. § 119							
1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)  1 Information Disclosure Statement(s) (PTO/SB/08)	12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
2. ☐ Certified copies of the priority documents have been received in Application No  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) ☒ Notice of References Cited (PTO-892)  2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) ☒ Information Disclosure Statement(s) (PTO/SB/08)	a)⊠ All b)□ Some * c)□ None of:							
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  * Attachment(s)  1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)  * See the attached detailed Office action for a list of the certified copies not received.  4) Interview Summary (PTO-413) Paper No(s)/Mail Date. Paper No(s)/Mail Date.  5) Notice of Informal Patent Application	1. Certified copies of the priority documents have been received.							
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) ☑ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☑ Information Disclosure Statement(s) (PTO/SB/08)  * See the attached detailed Office action for a list of the certified copies not received.  4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date  5) ☐ Notice of Informal Patent Application								
* See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)  * See the attached detailed Office action for a list of the certified copies not received.  4) Interview Summary (PTO-413) Paper No(s)/Mail Date  5) Notice of Informal Patent Application								
Attachment(s)  1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)  4) Interview Summary (PTO-413) Paper No(s)/Mail Date  Notice of Informal Patent Application								
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date  Notice of Informal Patent Application	* See the attached detailed Office action for a list of the certified copies not received.							
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date  Notice of Informal Patent Application								
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date  Notice of Informal Patent Application	Attachment(s)							
3) 🔲 Information Disclosure Statement(s) (PTO/SB/08) 5) 🔲 Notice of Informal Patent Application								
o) Minimitation Biodiocal o Catalino In(o) (1 1 o To Biod)								

Art Unit: 2873 OFFICE ACTION SUMMARY

## THE FOLLOWING IS A QUOTATION OF 35 U.S.C. 103(A) WHICH FORMS THE BASIS FOR ALL OBVIOUSNESS REJECTIONS SET FORTH IN THIS OFFICE ACTION:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

## Claims 1-4 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yahagi (JP 07-261080 A) in view of Ishii (JP 2002-098805 A).

In regard to claim 1 Yahaqi discloses a zoom lens (FIG. 2A-2C) comprising, in order from the object side, a first lens group G1 having positive refractive power, a second lens group G2 having negative refractive power, a third lens group G3 having positive refractive power, a fourth lens group **G4** having positive refractive power and a fifth lens group **G5** having positive refractive power, wherein during zooming from wide angle end to a telephoto end, the first lens group **G1** is fixed along the optical axis, the second lens group **G2** moves to the image side, the third lens group G3 is fixed, the fourth lens group G4 compensates for the fluctuation of the image plane position due to the shift of the second lens group G2 and moves along the optical axis for close-distance focusing, and the fifth lens group **G5** is fixed; an aperture diaphragm r11 is disposed in the vicinity of the third lens group G3; the fifth lens group G5 includes a negative sub lens group r18|r19 and a positive sub lens group r20|r21; and the zoom lens satisfies inequalities 0.6 < f5p/Da < 1.4 (Yahagi; Page 5, **Table I**: f5p/Da = 1.39; with  $\mathbf{f5p} = 13.979$  and  $\mathbf{Da} = 10$ ) where  $\mathbf{f5p} = \mathbf{focal}$  length of the positive sub lens group disposed in the fifth lens group G5, and Da = length extending along the. optical axis to a paraxial image position from a most-imagewise surface of the positive sub lens group disposed in the fifth lens group **G5**.

Yahagi does not disclose the aforesaid zoom lens with a lens or lens group moving perpendicularly to the optical axis to correct for image shake/blurring. This feature, however, has already been employed for the same purpose in a similar zoom lens disclosed by Ishii, in which the rear-most lens group **G5-2**|**G5-3** thereof provides such a function. At the time of the instant invention, when the same result is to be achieved, it would have been obvious for one of ordinary skill in the art to apply the teaching from Ishii to the zoom of document Yahagi with corresponding effect (e.g. since the image-shake/blurring correction function is not functionally linked with, and is clearly independent from the other features of the zoom lens, inasmuch as

Art Unit: 2873 *OFFICE ACTION SUMMARY* 

they are solutions of different independent problems). Independent claim 1 is therefore unpatentable over Yahagi, in view of Ishii.

<u>In regard to claim 2</u> Yahagi discloses a zoom lens (**FIG**. **2A-2C**) according to independent claim 1 which also satisfies the conditional equation  $0.5 < \mathbf{f5p/Db} < 1.3$  (Yahagi; Page 5, **Table I**:  $\mathbf{f5p/Db} = \mathbf{0.963}$ ; with  $\mathbf{f5p} = 13.979$  and  $\mathbf{Db} = 14.519$ ) where  $\mathbf{f5p} = \mathbf{focal}$  length of the positive sub lens group disposed in the fifth lens group **G5**, and  $\mathbf{Db} = \mathbf{length}$  extending along the optical axis to the aperture diaphragm from a most-object-side surface of the positive sub lens group disposed in the fifth lens group **G5**. Claim 2 is therefore unpatentable over Yahagi, in view of Ishii.

<u>In regard to claim 3</u> Yahagi discloses a zoom lens (**FIG**. **2A-2C**) according to independent claim 1 which also satisfies the conditional equation 0.3< |**f5n**|/**ft**< 0.9 (Yahagi; Page 5, **Table** I: **f5n/Db** = 0.525; with **f5n** = -21.354 and **ft** = 40.69) where **f5n** = focal distance of the negative sub lens group disposed in the fifth lens group **G5**; and ft is the focal length of the zoom lens system in the telephoto end mode. Claim 3 is therefore unpatentable over Yahagi, in view of Ishii.

In regard to claim 4 Yahagi discloses a zoom lens (**FIG. 2A-2C**) according to claim 2 which also satisfies the conditional equation  $0.3 < |\mathbf{f5n}|/\mathbf{ft} < 0.9$  (Yahagi; Page 5, **Table I**:  $\mathbf{f5n}/\mathbf{Db} = 0.525$ ; with  $\mathbf{f5n} = -21.354$  and  $\mathbf{ft} = 40.69$ ). Claim 4 is therefore unpatentable over Yahagi, in view of Ishii.

In regard to claims 9-12 The sole difference between claims 1-4 and claims 9-12, respectively is the feature/limitation which constitutes the preamble of independent claim 9: "An imaging apparatus comprising a zoom lens and an imaging device that converts an optical image formed through the zoom lens to an electric signal, the imaging apparatus being characterized in that:". The aforesaid feature/limitation is not given patentable weight, inasmuch as it only appears in the preamble; without any relationship to any of the features/limitations extant in the body of independent claim 9. Claims 9-12 are therefore unpatentable over Yahagi, in view of Ishii for the same reasons set forth above in this Office action, in regard to claims 1-4 of the instant application.

Claims 5-8 and 13-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. THE FOLLOWING IS A STATE-

Application/Control Number: 10/581,550 Page 4

Art Unit: 2873 OFFICE ACTION SUMMARY

MENT OF REASONS FOR THE INDICATION OF ALLOWABLE SUBJECT MATTER: in regard to claims 5-8 and 13-16, rewritten in independent form including all of the limitations of the base claim and any intervening claims, the prior art taken either singly or in combination fails to anticipate or fairly suggest a zoom lens comprising five individual lens units arranged in a [+ - + +] characterized in that "the positive sub lens group [emphasis added] disposed in the fifth lens group includes at least one positive lens and one negative lens [emphasis added], taken together in combination with the totality of particular features/limitations recited therein.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. European Patent Application Publication No. EP 1 705 508 A1 presents another National Stage of International Application No. PCT/JP2005/018128, set forth in the English language. Yahagi (U.S. Patent No, 5,548,445) is a English-language version of JP 07-261080 A, which was cited by the present applicant under an Information Disclosure Statement filed on June 2, 2006. The International Preliminary Report on Patentability (Form PCT/IB/373) including the Written Opinion of the International Searching Authority (Form PCT/ISA/237) prepared for the parent (International Application No. PCT/JP2005/018128) of the instant National Stage on April 17, 2007, has been considered by the examiner in the prosecution of the instant application. The Extended European Search Report (Form 1507S) prepared for the European National Stage Application on May 5, 2008 has also been considered by the examiner in the prosecution of the instant application.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Any other inquiry concerning this communication or earlier communications from the examiner should be directed to David N. Spector whose telephone number is (571) 272-2338. The examiner can normally be reached at this number Monday through Friday between 6:00 AM and 2:30 PM. The Official FAX number for the United States Patent and Trademark Office is (571) 273-8300.

/David N. Spector/
Primary Examiner, Art Unit 2873